

Items with Possible Y2K Compliance Issues

This document accompanies the EPA case studies of wastewater and/or water utilities performing year 2000 preparations. These case studies and other related reports can be found at the EPA Office of Water Year 2000 web site (<http://www.epa.gov/year2000/ow.htm>). The three utilities studied are: El Dorado Irrigation District (EID), a small water and wastewater utility east of Sacramento, CA; Eastern Municipal Water District (EMWD), a medium-sized water and wastewater utility east of Los Angeles; and Orange County Sanitation District (OCSD), a large wastewater utility in Southern California.

The following list includes items that were found to be either non-compliant, or could not be confirmed as Y2K compliant by the utilities. The list is divided into operations (equipment and control systems involved directly with the water or wastewater treatment and delivery process) and support (hardware and software involved with business and administration). Where possible, specific items are identified. However, this list is not meant to be exhaustive. It is meant as an example of the types of Y2K issues found in water and wastewater utilities of varying sizes. All of the items listed below have been replaced or upgraded by the case study participants.

Operations		
Item	Status	Utility
Operator interface software	Possible compliance issues	EID
Digital OpenVMS operating systems prior to version 7.1	Possible compliance issues	OCSD
Control software for biogas-burning Central Power Generation System	Non-compliant	OCSD
Many laboratory devices	Non-compliant	OCSD
Control software for laboratory equipment, such as an Ion Chromatograph	Non-compliant	EMWD
Many PCs with 386, or 486-type processors	Non-compliant	EID, EMWD
Some PCs with Pentium-type processors	Non-compliant	OCSD
Auto-dialers in pump stations and other places	Non-compliant	EID
Uninterruptible power supplies	Could not determine	OCSD
Power meters and monitors	Could not determine / Non-compliant	OCSD
Flow meters	Could not determine / Non-compliant	EID, OCSD
Back-up generators	Non-compliant	EMWD
A circular flow chart	Could not determine	EID
A chlorine analyzer	Could not determine	EID

Support		
Item	Status	Utility
Two-way radio repeater	Could not determine	EID
Trunked radio system manager	Non-compliant	EMWD
Telephone switching equipment	Non-compliant	EID
Voice mail system software	Non-compliant	EMWD
Hand-held meter readers (would continue to function in the year 2000, but they only use two-digit years)	Partially non-compliant	EID, EMWD
Many PCs with 386, or 486-type processors	Non-compliant	EID, EMWD
Some PCs with Pentium-type processors	Non-compliant	OCSD
Some versions of Microsoft's Windows operating systems	Partially non-compliant	All
Customer service software	Non-compliant	EID
Financial/billing software	Non-compliant	EID, EMWD
Payroll software	Non-compliant	EMWD
Investment management software	Non-compliant	EMWD
General business applications, such as 'Clipper'	Non-compliant	EMWD
Older, Novell network software	Non-compliant	OCSD